

# Functional Independence Mathematics

# **Official Released Items**

**Grade 11** 

Spring 2008
Official Released Items

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The Grade 11 Functional Independence Mathematics Assessment was administered for the first time in Spring 2006. Beginning with this administration, the Office of Educational Assessment and Accountability (OEAA) will annually release a portion of the items that are administered on the assessment. This booklet contains released items from the Spring 2008 administration and is intended to be used by districts to assist in their interpretation of item analysis data. The information contained in this booklet may also be used by schools, teachers, and parents as a resource for understanding the content and format of the assessment items. In addition to MI-Access training materials and Extended Benchmarks (EB), the released items may also have utility in informing decisions related to instruction, curriculum, and assessment. These items are **not** secure and may be copied and distributed as needed.

The table below lists the number of core and released items administered on the Spring 2008 Grade 11 assessment booklet. Core items are those that count toward students' scores. All released items in this booklet were selected from the pool of core items that appeared on the assessment.

### **Functional Independence Mathematics Grade 11**

Mathematics Strand	Number of Core Items
Patterns and Relationships	4
Geometry and Measurement	16
Data Analysis	2
Number Sense and Numeration	15
Numerical and Algebraic Operations	3
Total Core Items/Points	40
Released Items	12 (Numbers vary by strand and topic.)

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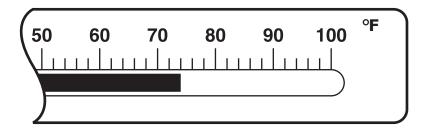
**DIRECTIONS**: Read each question. Choose the **BEST** answer for each question.

**R1** Which number comes **next** in the pattern?

24, 28, 32, \_\_\_\_

- **A** 24
- **B** 36
- **C** 42

Use the thermometer below to answer question R2.



- **R2** What is the approximate temperature shown?
  - **A** 68°F
  - **B** 72°F
  - **C** 74°F

**R3** The circles on the calendar below show which days Ben has a hockey game.

	February					
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

There is a pattern to the circled dates.

Which date did Ben forget to circle?

- **A** February 15
- **B** February 21
- **C** February 28

Use the calendar below to answer question **R4**.

April						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

**R4** Which date falls on a Tuesday?

- A April 3
- **B** April 12
- **C** April 25

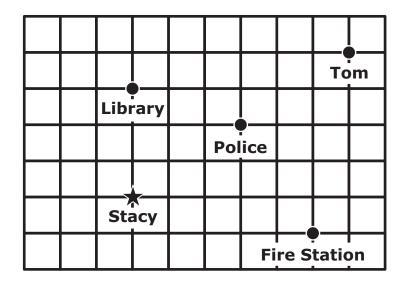
**R5** Morgan had \$162.00 in her bank account.

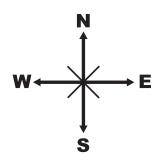
She withdrew \$38.00.

How much is **left** in her account?

- Α \$200.00
- \$134.00 В
- C \$124.00

**R6** The map below shows city blocks and several buildings.





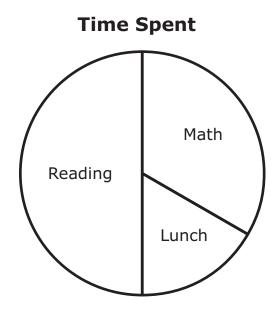
Key				
Each side of	is one block.			

Which set of directions could Stacy use to travel to Tom's location?

- **A** 6 blocks to the east and 4 blocks to the north
- **B** 2 blocks north and 3 blocks to the east
- **C** 5 blocks east and 1 block south

## **R7** Paula is at school for 6 hours each day.

The circle graph below shows how Paula spends her time at school.



How long does Paula spend in reading class?

- **A** 1 hour
- **B** 3 hours
- **C** 6 hours

**R8** Maria got the following scores on her mathematics quizzes:

84, 78, 92

What is the order of these scores from **lowest** to **highest**?

- **A** 92, 78, 84
- **B** 84, 92, 78
- **C** 78, 84, 92

R9 Julie bought a marker for \$2.50 and a notebook for \$4.60.

She paid with a \$20.00 bill.

How much money did Julie have **left**?

- \$11.90 Α
- В \$12.90
- C \$13.90

**R10** Shirts cost \$23.00 each.

What is the **best estimate** for how many shirts can be bought with \$100.00?

- **A** 3
- **B** 4
- **C** 6

R	11	Frank	has	18	hooks
		HUULIN	HUS	TO	DUUKS

Eva has 12 books.

Paul has 10 books.

How many **more** books does Frank have than Paul?

- Α 2
- 6 В
- C 8

**R12** A laundry washes 600 shirts every week.

This week, 395 shirts have been washed.

Which equation can be used to find out how many shirts are **left** to be washed?



Below is a list of the Extended Benchmarks (EB) for each released item found in this booklet. The chart contains the EB code, a brief description of what is measured, and the correct answer for each released item.

Full descriptions of the EB contained in the chart below are available for review and download at **www.mi.gov/mi-access**.

Released Item Number	EB Code	STRAND Or Abbreviated Extended Benchmark Descriptor	Answer Key
		Patterns and Relationships	
R1	F.11.FI.EB01	Create, describe, and extend simple number patterns	В
		Geometry and Measurement	
R2	G.11.FI.EB03	Measure and compare integer temperatures	С
R3	G.11.FI.EB13	Interpret schedules	А
R4	G.11.FI.EB13	Interpret schedules	С
R5	G.11.FI.EB17	Add and subtract money in dollars and cents	С
R6	G.11.FI.EB20	Use maps and grids with legends	А
		Data Analysis	
R7	D.11.FI.EB05	Solve problems using data	В
		Number Sense and Numeration	
R8	N.11.FI.EB04	Compare and order numbers to 100,000	С
R9	N.11.FI.EB18	Add, subtract, multiply and divide decimal fractions	В
R10	N.11.FI.EB19	Apply estimation	В
R11	N.11.FI.EB20	Select numbers to solve problems	С
		Numerical and Algebraic Operations	
R12	A.11.FI.EB03	Represent information using algebra	В



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